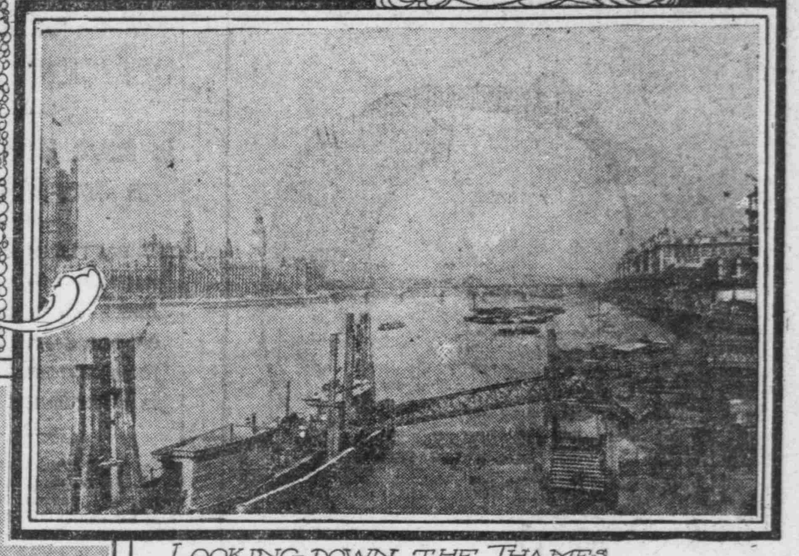
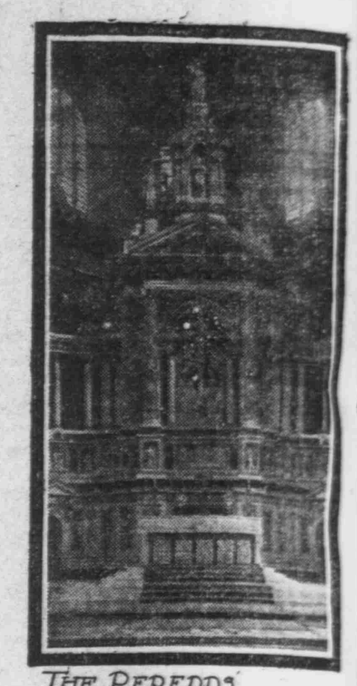
VIEW OF PARK LANE WEST, LONDON

EUROPE on two dollars per day



LOOKING DOWN THE THAMES



THE REREDOS, ST. PAUL'S LONDON

BY OUR SPECIAL CORRESPONDENT,

DR. W. A. CROFFUT.

London, June 30.—I am about to quit the big and noisy metropolis for the Continent, which is bigger, but I hope not noisier. I have tried to do all that you is cleverly festooned at intervals. commissioned me to do. I have ridden under the Thames in the "tube" and slept serenely under Big Ben as his deep diapason shook the tower at midnight. I have ridden on the omnibus roof till I seemed a part of the machine. I have been to Windsor Castle, Oxford, Cambridge; to Richmond Hill, where the Dukes of Richmond long rioted and where the poet Thomson wrote "The Seasons"—

Though the Castle of Richmond sits fair on the hill,
My hall, quoth bold Allan, sits gallanter still—

to the magnificent Kew Gardens, odorous and far-stretching; to Hampton Court, which Cardinal Wolsey gave to Henry VIII. when the King condescended to admire it, and where Catharine of Arragon and Anne Boleyn were in turn imprisoned by their fickle lord; to Hampstead Heath, where Dick Turpin headed off His Majesty's cavalcade in the good old times and gave their sovereigns and sixpences to the poor. I have burrowed into the dungeons under the Tower, where noble Englishmen and virtuous and lovely English women were thrown to await their beheadment. I have visited both houses of Parliament and, under the kindly escort of Sir William Jones, M. P., have witnessed a scrimmage between the government and the opposition. Some of these places and incidents I have tried to outline for your readers; others I shall speak of when I return from Paris, where I go today to see the great reception of the young King of Spain, for whom a magnificent salutation has been prepared.

London is making ready for his appearance, but the preparations here are as nothing in comparison with those of the French capital. In Paris all the boulevards he will traverse and many other streets are hung with superb tributes. A thousand handsomely painted poles, like florified liberty poles, have been set out in the streets, reaching above the lofty six-story housetops, garnished and varnished, like the gonfalons of Spain or the mottled masts of Venice, bearing aloft swinging hammocks of vines, vast baskets of flowers, festoons of gigantic birds, roses, harps, globes, lanterns, butterflies, all in yellow and red, the Spanish colors, and every few rods the gorgeous escutcheon of Spain, 10 feet square, with the towers of Grenada and lions rampant, topped with the jeweled crown of Castile and Leon and flanked with a simulacrum of the French orders which the young King wears upon his breast. Here and there amid the decorations comes the prow of a great trireme, significant of what I hardly know. By the way, the Arc de Triumph, reared in honor of the victories of the great Napoleon, is brilliant with red and yellow sunbursts, and through the splendors can be seen the names of Napoleon's victories in Spain—"Madrid, Barcelona," etc. It is a strange salutation!

London is not without its festivities, even before the coming of the youthful King of Spain. Edward and his royal spouse are dragged from function to function, morning, noon and night. Yesterday they opened the naval and military tournament at Agricultural Hall. His Majesty wore the uniform of field marshal, and drove up in an ordinary brougham and pair of grays, attended only by a couple of officers, with a single outrider in advance. The royal box was dressed in crimson and gold, and banked with flowers and palms, backed with cool-looking Indian muslin.

In the evening the royal couple were present again at the ball to 700 guests given in Kensington Palace by the Princess Henry of Battenberg. Dancing took place in the two white rooms, where Queen Victoria held her first levee. They were simply decorated with pink and white flowers, and opening from these were a spacious supper-room hung with baskets of fuchsias, and a pleasant tea-room, prettily decorated with a scheme of white and yellow, with an odorous balcony overhanging the gardens. The young princesses wore plain white dresses, that of the eldest being embroidered with silver. Minister Choate was resplendent in knee breeches and gold buckles.

Before making a flying visit to Paris let me say a word about how to travel in Europe with the least expense, worry and annoyance. If the reader needs to economize, let him economize wisely, not recklessly. It is far better to travel second class on large and rapid steamers than first class on slow ones. If you have more time than you have money, dear reader, there is a way in which you can see just as much by spending more time and half as much money. Join the Woman's Rest Tour Association of Boston. This is not a commercial institution, but purely a benevolent one. It neither seeks nor makes any profits. It was organized and exists for the mutual benefit of its members—women who have been to Europe or who wish to go. These philanthropists seem to have reduced the cost of travel to the lowest terms, for the beneficiaries are mostly clerks, schoolteachers and ladies who cannot afford high prices. The association prints a booklet twice a year containing a list of 1,000 boarding-houses ("pensions") throughout Great Britain and the Continent, with a classification as to character and excellence, an indication of the number of times the members have been guests of each, and detailed information as to sanitary conditions, prices, table, desirable location, "English spoken," "central heat," "lift," "gas," etc. The prices of board range from $1 to $2 per day—about half of hotel tariffs.

The Woman's Rest Tour Association has commendable functions. It aims to help with advice and encouragement women who might enjoy a vacation abroad if they knew how cheaply it can be had, and how easy the paths of travel may be made. It acts as a medium between demand and supply by stepping into the place of a much-needed confidential friend and adviser of women tourists. So let us who would live long and be happy array ourselves becomingly, get into light marching order, put our foot in the road, fall into step with a companion of serene temper and buoyant spirit, adopt the customs followed by other travelers, set our face toward the land we have long wished to see, and then

"Jog on, jog on the footpath way,
And merrily hent the stile-a."

Of course, those who wish to make the European tour without foolish expense will not travel in first-class cars. In most of the countries the first-class fare is four or five cents a mile, while the second-class fare is three cents and the third-class two cents or less. A familiar English saying is, "Nobody goes fust-class except princes, fools and Americans." This is almost literally true. The second-class cars are upholstered like the first-class in our own country, while the third-class are equipped so neatly and well that (outside of Italy) they are good enough for anybody. In some countries they have fourth-class cars, but the passengers are not always cleanly and the benches are to be avoided.

If the tourist determines to escape delay and annoyance as much as possible he will buy railroad tickets in a block for his tour instead of applying at a multitude of ticket offices. They are the schedule price and are redeemable without discount when not all used up.

As little baggage as possible should be carried, for all above 60 pounds must be paid for, while in Italy not a pound is exempted. By keeping his eyes open, constantly exercising a careful economy, avoiding hotels, and especially by settling for at least a week in a place, the traveler may easily keep his expenses below $2 a day.

Let him not be tawdry or slouchy in appearance. Let his entire costume be neat and serviceable. If there is a woman in the case let her not masquerade as a guy, but let her travel in a new, stout, plain and pretty dress of serge or tweed, and take along an attractive silk waist besides, remembering Emerson's startling apothegm: "The consciousness of being well dressed imparts a serenity of soul which all the consolations of religion are powerless to confer."

Some tourists indignantly refuse to tip. They consider giving fees to waiters and servants an immoral practice. The trouble is that abstinence from it is more expensive than indulgence in it. The Numerous American who insists on reconstructing the customs and manners of Europe as he goes along has a hard time of it. He is in hot water all the while. I never shall forget one such whom I saw in Lucerne. As the bus rolled up from the depot he got out. His wife and three barely grown-up girls remained in the vehicle. He was not a bumptious or pugnacious looking man—rather quiet than otherwise. Though he presently revealed himself as a crusader, he had the appearance of a respectable, and perhaps pious, manufacturer of brass buttons or pins in some Connecticut town. He was conspicuous in a linen duster and a white hat, his small but kindly eyes radiated wrinkles, and Time and Worry had joined teams and succeeded in plowing a parenthesis around his mouth.

"Air you the landlord?" he asked of the man at the door.

"I am the manager, yes, sir; at your service."

"Well, see here, Mr. Manager, what do you charge us five for board for three days? After that we go to Zurich."

"It depends on the room, sir. Second floor, 36 francs a day for three rooms; third floor, 30 francs a day; fourth floor, 24 francs, and there is a lift—an elevator—and——"

"Give us some first-rate rooms, Cap'n; money ain't much object to me—fust-rate rooms."

"Oui, monsieur—yes, sir. Our table d'hote is five francs, sir—that's a dollar—or, if you prefer it,—you and the ladies, sir—you can take your meals a la carte."

"By the card—yes, Cap—that's how we'll take our meals. Hang your table doty! I don't eat with all sorts of folks!"

"Very well, sir, we will try to please you. Porter, carry in the luggage."

"Wait a minute, manager. I don't want no misunderstanding. Half the trouble in this world comes of a misunderstanding. Now, see here! I don't tip. I won't pay any porter or chambermaid a cent—not a red cent."

"To pay them something is customary; but it is as you feel, sir. It is not necessary. Porter! Carry in the gentleman's——"

"Hold on. And I don't pay for candles. It's too blamed small business. I want candles to light the suite with if you aint got gas, and I aint going to pay a picayune for 'em."

"And Jonah!" exclaimed the buxom mother of the family, coming to the door of the 'bus and addressing her eloquent lord, "Don't you forget the soap and the ice!"

"We pay nuthing for soap and ice," chimed in the second daughter, an intelligent looking girl in a pink silk, edging towards the controversy with her alpenstock parasol and handbag.

"You shut up!" said the paternal remonstrant, turning on them suddenly and piping in a strident voice. "I can manage this feller! I pay for no soap, nor candles, nor ice, nor posters. I've been swindled enough in this blamed country. If you wouldn't paint your matches and fresco your toothpicks quite so brilliantly you might afford to furnish ice and candles."

This disparaging allusion to the practice of staining all the matches red and all the toothpicks green, which prevails throughout Europe, was the last feather that caused the overworked camel's spine to double up—the fatal arrow that pierced the manager's soul. "Very well," he said quietly, "you can merely pay for your ride here from the station—five francs, if you please."

"Put it in the bill!" shouted the reformer. "I'll pay when we go away. I'm good for it. Come on Marier!"

"I have no bill against you," explained the manager, "and as you are going away now I merely mention the item."

"Goin' away now? What do you mean? Didn't I tell you to give us three rooms?"

"You did, sir; you did; but I regret to say that they have since been taken."

"Taken? Haint you ben standing here every minute?"

The porter came forward and confirmed the assertion of the manager that there was not a room left in the hotel.

"Didn't you jest say that you had vacant rooms on every floor?"

"We had at that time, sir. To be entirely frank with you, we like Americans generally very much, indeed, but you had better try elsewhere."

The American reformer looked chagrined. So did "Marier," standing on the pavements, and the oldest girl on the steps. "All right!" he said, bravely, adding, rather inconsequently, "I ain't a-going to pay for nothing I don't have. How much do I owe you, cap'n?"

"Five francs for the ride from the station, sir."

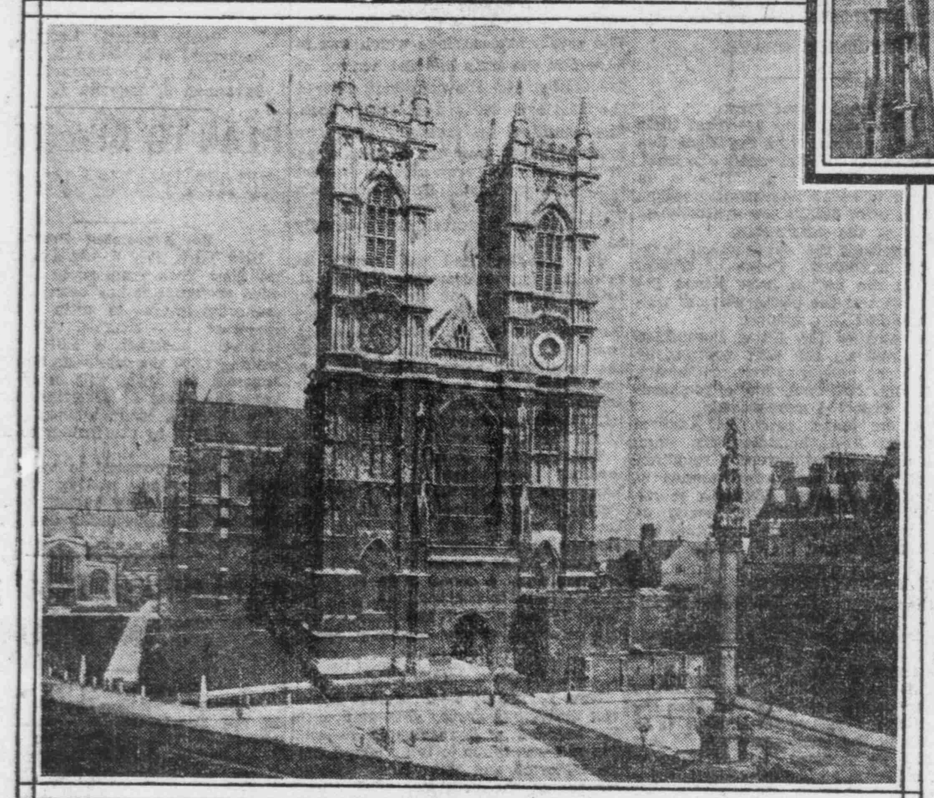
"And five more to carry us to the Schweizerhof, I reckon?"

"Yes, unless you walk. It is a couple of hundred feet."

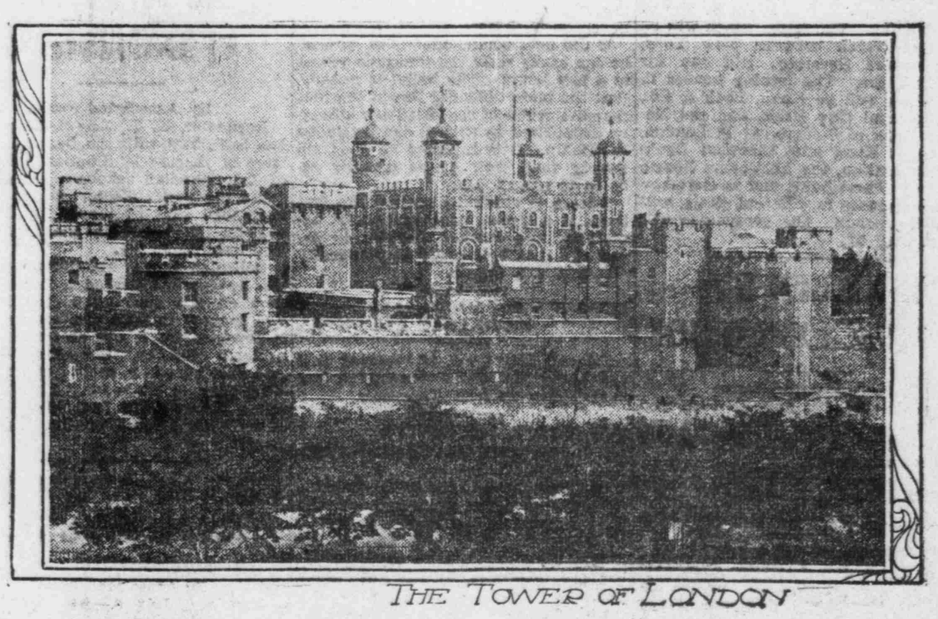
"No, sir, donkey, as we say in German, I don't walk nowhere! We'll ride. Here's your money."

They climbed madly, sadly in. The trunks were again carried up the ladder to the top and the vehicle whirled away—and wheeled up to the Schweizerhof—next door. I presently saw the reformer gesticulating and "Marier" was assisting from the step. Being called away I lost sight of the curious crusaders, but when I passed the hotel Schwannen half an hour later the girls were standing in the door, with their bandboxes and alpenstocks and opera glasses and canteens and Jacob and Marier were out on the walk and Jacob wiped his neck with a silk bandana and said: "Wall, where in thunder shall we try next? I've about wore myself out telling these confounded rascals what I think of them. I don't know but we'd better tumble to their way. It's easier and wouldn't cost a jot more."

I have no doubt they got comfortably sheltered somewhere and fed "on the European plan." They did if Jacob was wise.



WEST TOWERS, WESTMINSTER ABBEY



THE TOWER OF LONDON

GILDED RUBBISH.

A valuable object-lesson on the indestructibility of matter, and gold in particular, is to be derived from a visit to a gold refiner's establishment. Gold is present in or on an endless variety of articles in everyday use, and it can be extracted and re-used after the article has been rendered useless through age or damage. One would scarcely think, for instance, as one hands in a gilt-edged visiting card that after it has served its purpose there still remained enough gold on it to be worth extracting, yet such is the case.

Old picture frames, books with gilt-edged leaves or gold lettering on the covering, scraps of gilt moldings and a thousand and one odds and ends are carefully collected by dealers, and when a sufficient quantity has been amassed they are dispatched to the refinery. Nothing with the tiniest speck of gold or silver upon it is overlooked, considered too insignificant or too cumbersome.

On the occasion of a recent visit to an establishment there was found a large consignment awaiting treatment. Among a cartload of broken picture frames were the sections of a huge and elaborately ornamented frame that once contained an enormous mirror—part of the bar fittings of a hotel that had been pulled down. Originally this magnificent frame must have cost $500 or more.

Sawn into convenient lengths and sent to the refiners an expert estimated that probably about $20 worth of gold would be extracted from it. This is by no means an exceptional example of the "mighty fallen" that find their way to the furnaces, for everything that has gold in it at all is always worth putting through the furnace. Several large sacks were found stuffed full of odds and ends—book covers, waste photographic material, etc. These were all crammed into a furnace and burned. The furnaces are arranged in a row and are fitted with a plain sliding lid. They are of various sizes, according to the work in hand.

The rubbish having been reduced to ashes, the latter are then carefully sifted and the cinders thrown into another fire to complete the combustion. To the fine ashes flux is added, and the material is then ready to be placed in the crucible in which it undergoes its final fiery ordeal and by this means the metal is discovered. Flux is a compound of borax, bicarbonate or soda, saltpetre and pearl ash. Different combinations are used according to the contents of the ashes to be treated.

The flux, when melted, greatly facilitates the reduction of the material, and at the same time eliminates all the baser metals except copper. Eventually a point is reached beyond which the contents of the crucible can be reduced no further, so the vessel is withdrawn. The fierce heat and the glow of the furnace when open necessitates the men engaged in this task wearing a long, thick mitten, and also a pair of specially constructed glasses to protect the hand and eyes.

After being allowed to cool, the crucible is conveyed to a little iron anvil and the bottom broken off with a hammer. The contents are then found to have stratified into three distinct layers. The top is of a greenish color and consists of the slag; the second is blackish-brown, and is practically "glass;" and last of all, deposited by its specific gravity, is a button of gold. Accidents will happen at times, however, and occasionally the metal "sputters" during the process of melting, with the result that tiny globules of gold adhere to the side of the crucible, in which case the vessel is pounded to dust in a mortar, and the process of melting repeated.

At times a crucible bursts, and the contents are precipitated into the fire, necessitating the pounding up and remelting of the entire contents of the furnace. The sweepings from the floors of manufacturing jewellers' premises are always rich in metal, owing to the amount of things they include. Another curious substance that is sent regularly to the refiners is the rubber used by bookbinders to remove the superfluous gold leaf from illuminated covers. After laying on the leaf, the cover is wiped by the binders with a handful of plastic rubber, to which all the loose gold leaf adheres, leaving the lettering sharply defined. A ball of this pure rubber, after being used for a month or two, will yield a button of considerable size and value. These balls are not purchased by the firm, but sent to be melted down, and the product returned to the binders to be beaten again into gold leaf.

The rags used by the workers who execute the gold lettering on marble slabs, etc., are carefully preserved and treated in the same manner. None of the ashes from any of the furnaces are ever thrown away, but are carefully sifted, and the larger ones sent to a crushing mill. When the finer ones have accumulated sufficiently, they are assayed by extracting 2 ounces from the bulk. The addition of lead to the fluxes carries all the metal to the bottom of the crucible; it is then smoked off by means of considerable heat and a great draught, what remains in the capel being pure metal.

DETHRONING THE COMPASS.

Another autocrat has been dethroned to make way for a rival, after holding undisputed sway for nearly a thousand years. For the compass has ruled the waters of the earth since 1075. The first reliable record of a compass being used in Europe occurs in the poem "La Bible," in which the magnetizing of steel is also referred to. In 1498 Vasco di Gama found the pilots in the Indian Ocean using compasses. The innumerable discoveries made during these thousand of years would have been an impossibility without this indispensable instrument, and yet the time has come when it no longer answers the demands of modern geographical science.

A young scientist in Munich, in trying to solve the problem of reaching the North Pole by means of a submarine boat, found it necessary to invent some instrument to take the place of the compass. After two years of hard study and untiring experiments he has at last succeeded in constructing an apparatus that answers every requirement—the "gyroscope," as he calls it.

WHAT IS THE GYROSCOPE?

The external appearance of the gyroscope resembles a large kettle, about 32 inches in diameter, and 40 inches deep, with a window in its iron walls for observation purposes. Like the box compass, it has a disc with a compass card in place of a cover, and the pointer, to indicate the direction, moves from the center of the disc, just like the compass needle.

Its fundamental point of construction is a rotating wheel of compendious workmanship, which rotates without being affected by the turning of the earth's axis. An electromotor, which supplies two peculiarly constructed and minutely balanced flywheels, with the power needed for 2,000 rotations per minute, is placed in the center of this wheel.

Unlike the compass, the point of the gyroscope does not always indicate the same direction, but can be set to point anywhere, and it will retain its position as long as the motor causes the wheel to rotate, independent of the course of the ship or of the heaving and sinking of its bulk. In this respect the gyroscope has another advantage over even the most perfectly constructed compass, for it can be used for other purposes—for instance, on a warship, to adjust projectiles and cannon-balls. It is a puzzling sight, indeed, for the observer, when he watches the workings of this remarkable instrument and its unerring pointer, which always points in a given direction, no matter how the apparatus is turned or disturbed, and never gets out of order. France is said to own an instrument similar to this, which she uses on her submarine boats, but about the construction of which the most profound secrecy prevails.